

EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	86	((coup\$3 near2 (fiber or fibre or fiberoptic or fibreoptic or fibre-optical or fibre-optical or fiberoptical or fibreoptical or fiber-optic or fibre-optic)) with laser) and ((laser with ((vertical near2 cavity) or (surface near2 emit\$4))) and ((lens or micro lens or micro-lens or collimat\$3 or focus\$3) with (spherical or ball or round)) and ((lens or micro lens or micro-lens or collimat\$3 or focus\$3) with (aspherical or concave or convex)))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/02/21 11:08
S2	67	S1 and @ad < "20030702"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/02/18 14:22
S3	414	((coup\$3 near2 (fiber or fibre or fiberoptic or fibreoptic or fibre-optical or fibre-optical or fiberoptical or fibreoptical or fiber-optic or fibre-optic)) with laser) and ((lens or micro lens or micro-lens or collimat\$3 or focus\$3) with (spherical or ball or round)) and ((lens or micro lens or micro-lens or collimat\$3 or focus\$3) with (aspherical or concave or convex)))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/02/18 14:22
S4	361	S3 and @ad < "20030702"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/02/18 15:28
S5	1	("2002/0159695").URPN.	USPAT	OR	OFF	2006/02/18 14:25
S6	0	("2002/0085597").URPN.	USPAT	OR	OFF	2006/02/18 14:29
S7	0	("2002/0085597").URPN.	USPAT	OR	OFF	2006/02/18 14:29
S8	0	("2002/0076174").URPN.	USPAT	OR	OFF	2006/02/18 14:29
S9	9	("20020114082" "20030039276" "20030058904" "20040051956" "4915484" "5125052" "5181224" "5553174" "6075650").PN. OR ("6768593").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/02/18 14:32
S10	1	("2004/0051956").URPN.	USPAT	OR	OFF	2006/02/18 14:32

EAST Search History

S11	72	("4168883" "4204743" "4265511" "4307934" "4355321" "4451115" "4501637" "4616899" "4639077" "4687285" "4698662" "4707067" "4711521" "4733932" "4740259" "4752109" "4753508" "4758719" "4790618" "4818053" "4824202" "4842391" "4862231" "5046798" "5050953" "5073047" "5074682" "5075253" "5175783" "5181265" "5214845" "5239605" "5244818" "5247530" "5257336" "5283447" "5287001" "5291064" "5337398" "5347605" "5362976" "5416869" "5440658" "5452389" "5457759" "5463707" "5485021" "5495545" "5500540" "5504828" "5521999" "5526455" "5537504" "5546212" "5546490" "5548676" "5555334" "5566264" "5566265" "5600741" "5631992" "5692083" "5734771" "5737133" "5737465" "5745625" "5771218" "5940564" "6243508" "RE34790").PN. OR ("6741777").URPN.	US-PGPUB; USPAT, USOCR	OR	OFF	2006/02/18 14:34
S12	10	("5832011" "6058131" "6233045" "6273620" "6310997" "6394665" "6415078").PN. OR ("6618405").URPN.	US-PGPUB; USPAT, USOCR	OR	OFF	2006/02/18 14:35
S13	3	("20020141682" "6345138").PN. OR ("6558048").URPN.	US-PGPUB; USPAT, USOCR	OR	OFF	2006/02/18 14:49
S14	13	("3628294" "3932184" "5011254" "5256851" "5377287").PN. OR ("5701373").URPN.	US-PGPUB; USPAT, USOCR	OR	OFF	2006/02/18 14:54
S15	4	("5701373" "5745625").PN. OR ("6026206").URPN.	US-PGPUB; USPAT, USOCR	OR	OFF	2006/02/18 14:55
S16	3	("4919506").PN. OR ("5684901").URPN.	US-PGPUB; USPAT, USOCR	OR	OFF	2006/02/18 14:56
S17	28	("4078852" "4111522" "4190316" "4307934" "4380365" "4475788" "4639077" "4650285" "4687285" "4705351" "4726645" "4726648" "4781431" "4807958" "4830453" "4841344" "4842391" "4846544").PN. OR ("4919506").URPN.	US-PGPUB; USPAT, USOCR	OR	OFF	2006/02/18 14:57
S18	10	("4842391" "4919506" "5175783" "5301249" "5511140" "5537504").PN. OR ("5638475").URPN.	US-PGPUB; USPAT, USOCR	OR	OFF	2006/02/18 14:57

EAST Search History

S19	16	("4588263" "4611883" "4978189" "5073003" "5638475" "5771323").PN. OR ("5911021").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/02/18 14:57
S20	21	("4687285").URPN.	USPAT	OR	OFF	2006/02/18 15:00
S21	60	("4204743" "4265511" "4307934" "4451115" "4501637" "4687285" "4707067" "4711521" "4740259" "4752109" "4753508" "4790618" "4818053" "4824202" "4842391" "5073047" "5074682" "5175783" "5181265" "5247595" "5257336" "5337398" "5347605" "5452389" "5463707" "5504828" "5526455" "5537504" "5546212" "5566265" "5600741" "5737133" "5778124" "5835514" "Re34790").PN. OR ("5940564").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/02/18 15:06
S22	534	(S4 or S5 or S6 or S7 or S8 or S9 or S10 or S11 or S12 or S13 or S14 or S15 or S16 or S17 or S18 or S19 or S20 or S21)	US-PGPUB; USPAT; USOCR	OR	OFF	2006/02/18 15:08
S23	592	(laser near2 (module or package)) and ((second\$3 or two) near2 (lens or micro lens or micro-lens or collimat\$3 or focus\$3)) and ((ball or spherical or round) with (lens or micro lens or micro-lens or collimat\$3 or focus\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/02/18 15:08
S24	535	S23 not S22	US-PGPUB; USPAT; USOCR	OR	OFF	2006/02/18 15:08
S25	535	S24 not S4	US-PGPUB; USPAT; USOCR	OR	OFF	2006/02/18 15:08
S26	414	S25 and @ad<"20030702"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/02/18 15:09

EAST Search History

S27	21	("2303113" "3652150" "3749477" "3751138" "4017160" "4203652" "4253735" "4318594" "4362367" "4530574" "4744073" "5095386" "5181224" "5467335" "5499262" "5844723" "5973853" "6088168" "6088170").PN. OR ("6301059").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/02/18 15:22
S28	4602	VCSEL	US-PGPUB; USPAT; USOCR	OR	OFF	2006/02/18 15:25
S29	41	vcSEL.ab. and ((second\$3 or two) near\$3 (lens or micro-lens or microles or collimat\$3 or focus\$3))	US-PGPUB; USPAT; USOCR	OR	OFF	2006/02/18 15:29
S30	9	("4934787" "5044717" "5117472" "5138675" "5395362" "5892866" "6208678" "6418251").PN. OR ("6674941").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/02/18 15:24
S31	9	("4807954" "5015057" "5309542" "5696862" "6061493" "6071017" "6283644").PN. OR ("6607309").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/02/18 15:25
S32	219	VCSEL.ti.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/02/18 15:26
S33	177	VCSEL.ti.	EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/18 15:26
S34	158	S33 and @ad<"20030702"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/02/18 15:36
S35	6	vcSEL.ab. and ((second\$3 or two) near\$3 (lens or micro-lens or microles or collimat\$3 or focus\$3))	EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/18 15:29

EAST Search History

S36	19	S33 not S34	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/02/18 15:32
S37	0	((coupl\$3) near2 (optic\$6)) with (system)) and ((second\$3 or two) near2 (lens or micro-lens or micro-lens or collimat\$3 or focus\$3 or beam-shap\$3 or beamshap\$3 or shap\$3)) and ((ball or spherical or round) with (lens or micro-lens or micro-lens or collimat\$3 or focus\$3 or beam-shap\$3 or beamshap\$3 or shap\$3)) and (aspheric\$6 with (lens or micro-lens or collimat\$3 or focus\$3 or beam-shap\$3 or beamshap\$3 or shap\$3))	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/02/18 15:34
S38	0	((coupl\$3) near2 (optic\$6)) with (system)) and ((second\$3 or two) near2 (lens or micro-lens or micro-lens or collimat\$3 or focus\$3 or beam-shap\$3 or beamshap\$3 or shap\$3)) and ((ball or spherical or round) with (lens or micro-lens or micro-lens or collimat\$3 or focus\$3 or beam-shap\$3 or beamshap\$3 or shap\$3)) and (aspheric\$6 with (lens or micro-lens or collimat\$3 or focus\$3 or beam-shap\$3 or beamshap\$3 or shap\$3))	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/02/18 15:35
S39	0	((coupl\$3) near2 (optic\$6)) with (system)) and ((second\$3 or two) near2 (lens or micro-lens or micro-lens or collimat\$3 or focus\$3 or beam-shap\$3 or beamshap\$3 or shap\$3)) and ((ball or sphere\$6 or round) with (lens or micro-lens or micro-lens or collimat\$3 or focus\$3 or beam-shap\$3 or beamshap\$3 or shap\$3)) and (aspheric\$6 with (lens or micro-lens or collimat\$3 or focus\$3 or beam-shap\$3 or beamshap\$3 or shap\$3))	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/02/18 15:35
S40	1	((coupl\$3) near2 (optic\$6)) and ((second\$3 or two) near2 (lens or micro-lens or micro-lens or collimat\$3 or focus\$3 or beam-shap\$3 or beamshap\$3 or shap\$3)) and ((ball or sphere\$6 or round) with (lens or micro-lens or micro-lens or collimat\$3 or focus\$3 or beam-shap\$3 or beamshap\$3 or shap\$3)) and (aspheric\$6 with (lens or micro-lens or collimat\$3 or focus\$3 or beam-shap\$3 or beamshap\$3 or shap\$3))	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/02/18 15:35

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S41	302	((second\$3 or two) near2 (lens or microlens or micro-lens or collimat\$3 or focus\$3 or beam-shap\$3 or beamshap\$3 or shap\$3)) and ((ball or spher\$6 or round) with (lens or microlens or micro-lens or collimat\$3 or focus\$3 or beam-shap\$3 or beamshap\$3 or shap\$3)) and (aspheric\$6 with (lens or microlens or micro-lens or collimat\$3 or focus\$3 or beam-shap\$3 or beamshap\$3 or shap\$3))	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/02/18 15:42
S42	283	S41 and @ad<"20030702"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/02/18 15:56
S43	71	((second\$3 or two) near2 (lens or microlens or micro-lens or collimat\$3 or focus\$3 or beam-shap\$3 or beamshap\$3 or shap\$3)) and ((ball or spher\$6) with (lens or microlens or micro-lens or collimat\$3 or focus\$3 or beam-shap\$3 or beamshap\$3 or shap\$3)) and (aspheric\$6 with (lens or microlens or micro-lens or collimat\$3 or focus\$3 or beam-shap\$3 or beamshap\$3 or shap\$3)).ab.	US-PGPUB; USPAT; USOCR	OR	ON	2006/02/18 15:44
S44	106	(vcsel or ((surface near2 emit\$3) with laser) or ((vertic\$5 near2 cavity) with laser)) and ((coup1\$4 near2 (fiber or fibre or fibre-optic or fibre-optic or fiberoptic or fibreoptic or fiber-optical or fibre-optical or cable)) same ((spherical or ball) near2 (lens or microlens or micro-lens)))	US-PGPUB; USPAT; USOCR	OR	ON	2006/02/18 15:55
S45	2	(vcsel or ((surface near2 emit\$3) with laser) or ((vertic\$5 near2 cavity) with laser)) and ((coup1\$4 near2 (fiber or fibre or fibre-optic or fibre-optic or fiberoptic or fibreoptic or fiber-optical or fibre-optical or cable)) same ((spherical or ball) near2 (lens or microlens or micro-lens)))	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/02/18 15:46
S46	0	("2005/0123237").URPN.	USPAT	OR	OFF	2006/02/18 15:47
S47	2	(vcsel or ((surface near2 emit\$3) with laser) or ((vertic\$5 near2 cavity) with laser)) and ((coup1\$4 near2 (fiber or fibre or fibre-optic or fibre-optic or fiberoptic or fibreoptic or fiber-optical or fibre-optical or cable)) same ((spherical or ball) near2 (lens or microlens or micro-lens)))	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/02/18 15:55
S48	3	(vcsel or ((surface near2 emit\$3) with laser) or ((vertic\$5 near2 cavity) with laser)) and ((coup1\$4 near2 (fiber or fibre or fibre-optic or fibre-optic or fiberoptic or fibreoptic or fiber-optical or fibre-optical or cable)) and ((spherical or ball) near2 (lens or microlens or micro-lens)))	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/02/18 15:55

EAST Search History

S49	274	(vcse1 or ((surface near2 emit\$3) with laser) or ((vertic\$5 near2 cavity) with laser)) and ((coupl\$4 near2 (fiber or fibre or fiber-optic or fibre-optic or fiberoptic or fibreoptic or fiber-optical or fibre-optical or cable)) and ((spherical or ball) near2 (lens or microlens or micro-lens)))	US-PGPUB; USPAT; USOCR	OR	ON	2006/02/18 15:55
S50	168	S49 not S44	US-PGPUB; USPAT; USOCR	OR	ON	2006/02/18 15:56
S51	133	S50 and @ad < "20030702"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/02/18 15:56

EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	1	("5684901").PN.	USPAT	OR	OFF	2006/02/21 11:08
L2	1	1 and (glass or plastic)	USPAT	OR	OFF	2006/02/21 14:44
L3	0	1 and (power)	USPAT	OR	OFF	2006/02/21 13:09
L4	1	1 and ((fiber or fibre) with (focal))	USPAT	OR	OFF	2006/02/21 13:24
L5	1	("20020162338").PN.	US-PGPUB; USPAT	OR	OFF	2006/02/21 13:24
L6	0	5 and (glass or plastic)	US-PGPUB; USPAT	OR	OFF	2006/02/21 13:24
L7	0	5 and (glass\$5 or plastic\$5)	US-PGPUB; USPAT	OR	OFF	2006/02/21 13:26
L8	1	5 and (material)	US-PGPUB; USPAT	OR	OFF	2006/02/21 13:24
L9	0	1 and (material)	USPAT	OR	OFF	2006/02/21 13:25
L10	1	("20040247242").PN.	US-PGPUB; USPAT	OR	OFF	2006/02/21 13:25
L11	0	10 and (glass\$5 or plastic\$5)	USPAT	OR	OFF	2006/02/21 13:25
L12	1	10 and (glass\$5 or plastic\$5)	US-PGPUB; USPAT	OR	OFF	2006/02/21 13:26
L13	3	((("6010251") or ("6568864") or ("6618405")).PN.	USPAT	OR	OFF	2006/02/21 13:26
L14	1	13 and (glass\$5 or plastic\$5)	US-PGPUB; USPAT	OR	OFF	2006/02/21 14:07
L15	4	((spherical near2 lens) with (glass near3 advantage\$4))	US-PGPUB; USPAT	OR	ON	2006/02/21 14:08
L16	5	((spherical near2 lens) with (glass near4 advantage\$4))	US-PGPUB; USPAT	OR	ON	2006/02/21 14:09
L17	858	((spherical near2 lens) with (glass))	US-PGPUB; USPAT	OR	ON	2006/02/21 14:09
L18	108	((spherical near2 lens) with (glass)) and ((aspherical near2 lens) with plastic)	US-PGPUB; USPAT	OR	ON	2006/02/21 14:22

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L19	4	((spherical near2 lens) with (glass near2 advantag\$6))	US-PGPUB; USPAT	OR	ON	2006/02/21 14:23
L20	29	((spherical near2 lens) same (glass with advantag\$6))	US-PGPUB; USPAT	OR	ON	2006/02/21 14:23
L21	0	1 and (material)	USPAT	OR	OFF	2006/02/21 14:45
L22	0	1 and (materials)	USPAT	OR	OFF	2006/02/21 14:46
L23	1	1 and (glass\$ or plastic\$)	USPAT	OR	OFF	2006/02/21 14:47
L24	1	13 and (glass\$ or plastic\$)	USPAT	OR	OFF	2006/02/21 14:46
L25	1	13 and (material\$)	USPAT	OR	OFF	2006/02/21 14:47
L26	1	10 and (material\$)	US-PGPUB; USPAT	OR	OFF	2006/02/21 14:47
L27	1	10 and (glass\$ or plastic\$)	US-PGPUB; USPAT	OR	OFF	2006/02/21 15:01
L28	0	10 and (convex\$6 or concav\$6)	US-PGPUB; USPAT	OR	OFF	2006/02/21 15:06
L29	0	1 and window	US-PGPUB; USPAT	OR	OFF	2006/02/21 15:47
L30	0	1 and detector	US-PGPUB; USPAT	OR	OFF	2006/02/21 15:47
L31	0	1 and photodetector	US-PGPUB; USPAT	OR	OFF	2006/02/21 15:48
L32	0	1 and photodiode	US-PGPUB; USPAT	OR	OFF	2006/02/21 16:06
L33	1	("20040247242").PN.	US-PGPUB; USPAT	OR	OFF	2006/02/21 16:06
L34	0	33 and mode	USPAT	OR	OFF	2006/02/21 16:07
L35	1	33 and mode	US-PGPUB; USPAT	OR	OFF	2006/02/21 16:10
L36	1	33 and material	US-PGPUB; USPAT	OR	OFF	2006/02/21 16:21

EAST Search History

L37	0	33 and concave	US-PGPUB; USPAT	OR	OFF	2006/02/21 16:21
L38	1	33 and aspheric\$9	US-PGPUB; USPAT	OR	OFF	2006/02/21 16:33
L39	1	33 and (detector\$4 or photodetector\$4 or photo\$9)	US-PGPUB; USPAT	OR	OFF	2006/02/21 16:33